

Date	Prepared by	Approved by	Document nos	Revision
7 Jul 2023	Ray Ling	Pavel	MS-8H-120-IM-001	0

INSTRUCTION MANUAL MS-8H120

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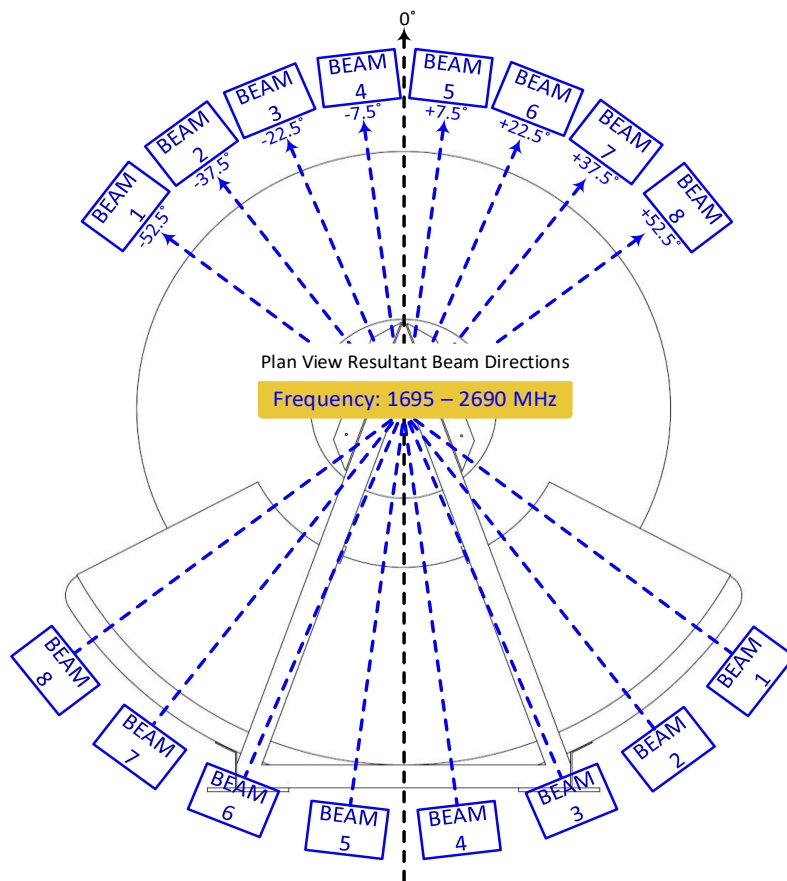
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Revision History:

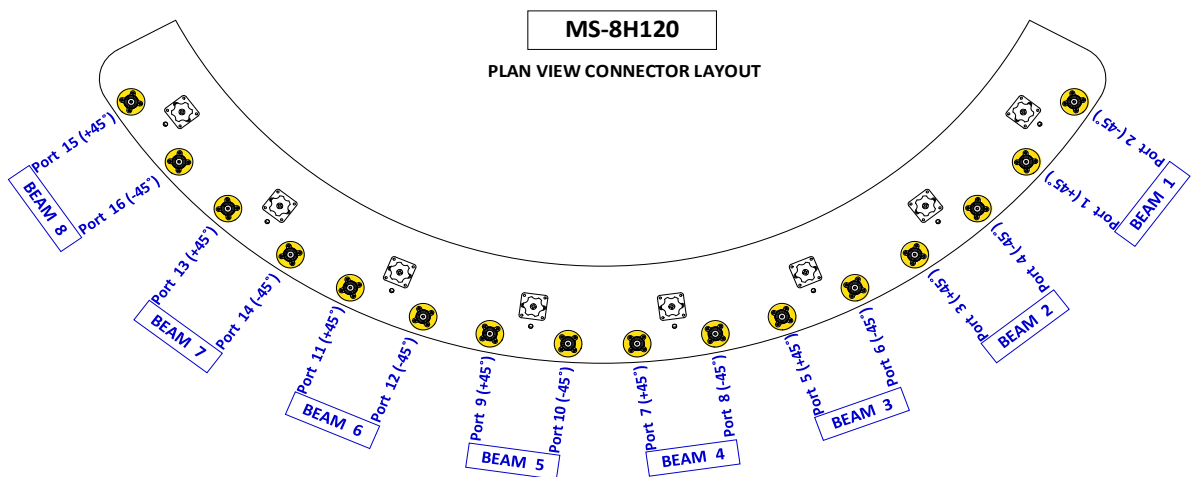
Date	Description	Revised by	Revision nos.

1.00 BEAMS & CONNECTORS:

1.10 Plan View Resultant Beam Direction



1.20 Plan View Connector Layout

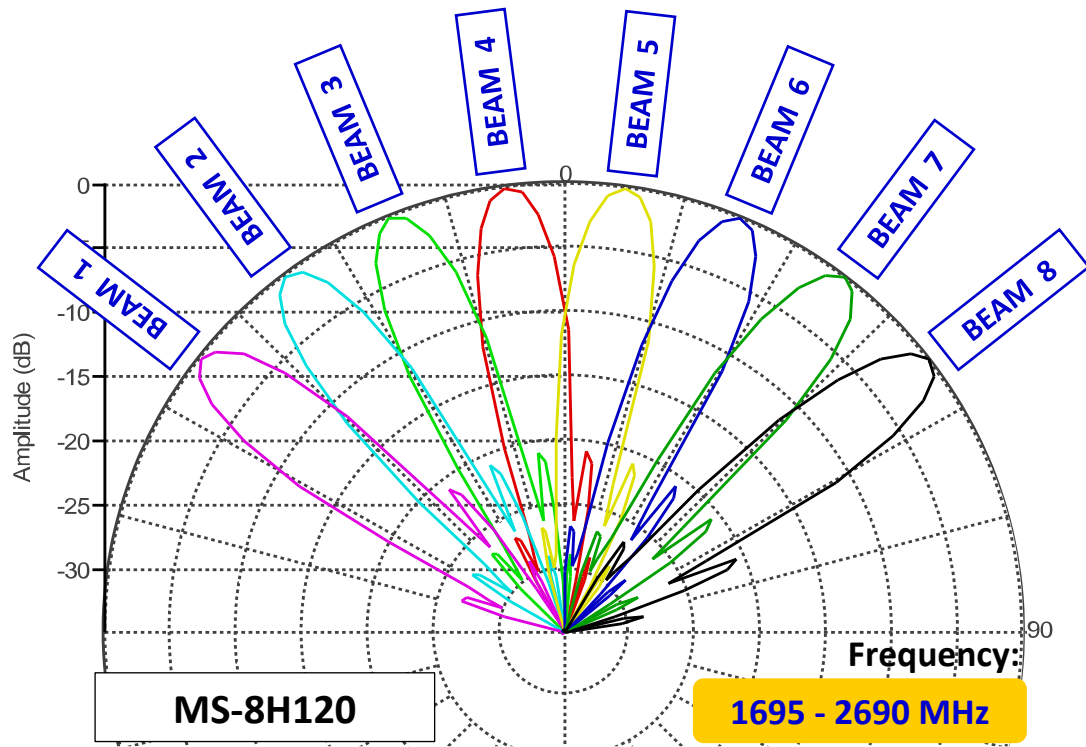


1.30 Connector Ports Table

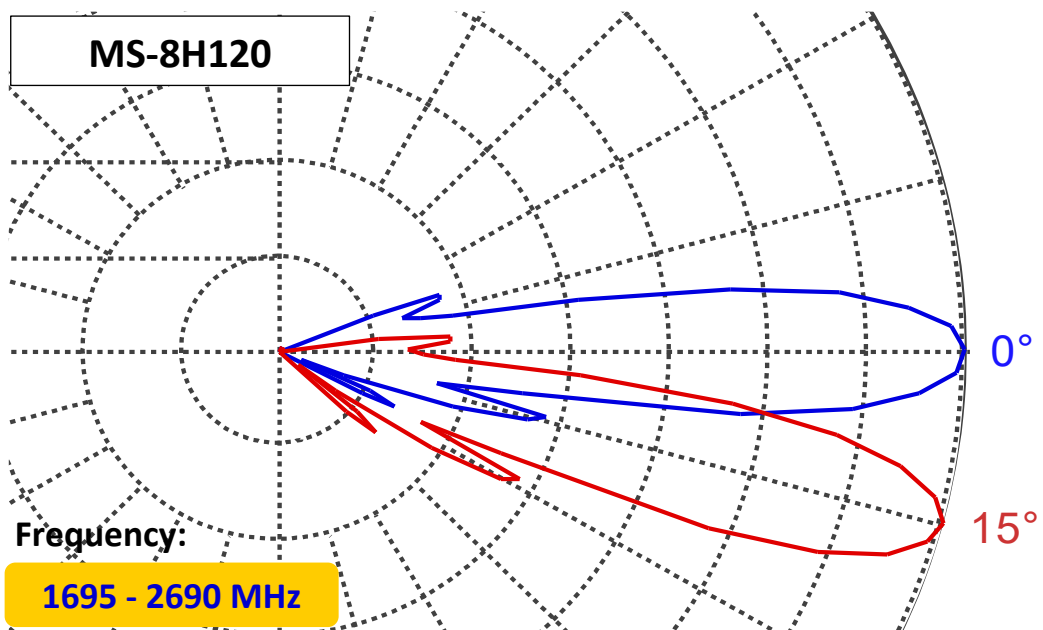
BEAM 8		BEAM 7		BEAM 6		BEAM 5		BEAM 4		BEAM 3		BEAM 2		BEAM 1	
PORT	PORT	PORT	PORT	PORT	PORT	PORT	PORT	PORT	PORT	PORT	PORT	PORT	PORT	PORT	PORT
15	16	13	14	11	12	9	10	7	8	5	6	3	4	1	2
($+45^\circ$)	(-45°)	($+45^\circ$)	(-45°)	($+45^\circ$)	(-45°)	($+45^\circ$)	(-45°)	($+45^\circ$)	(-45°)	($+45^\circ$)	(-45°)	($+45^\circ$)	(-45°)	($+45^\circ$)	(-45°)

2.00 PATTERN DIAGRAM

2.10 Horizontal Beam Pattern



2.20 Vertical Beam Pattern

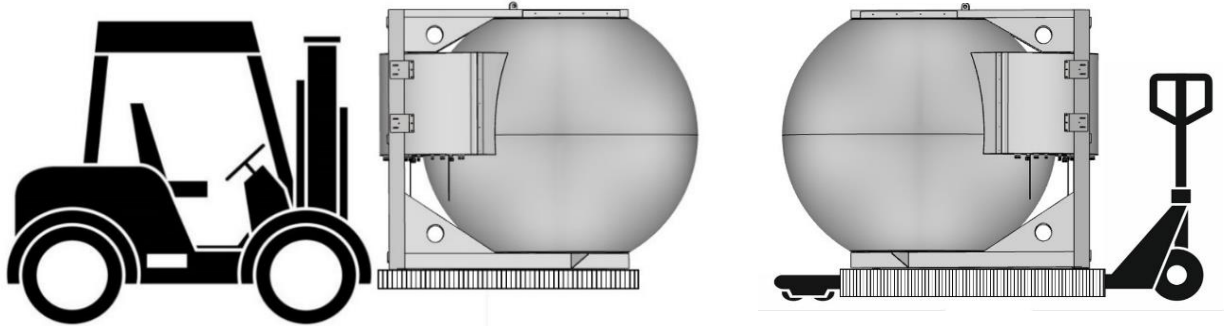


3.00 TRANSPORTATION / INSTALLATION

3.10 Transportation (From Point to Point)

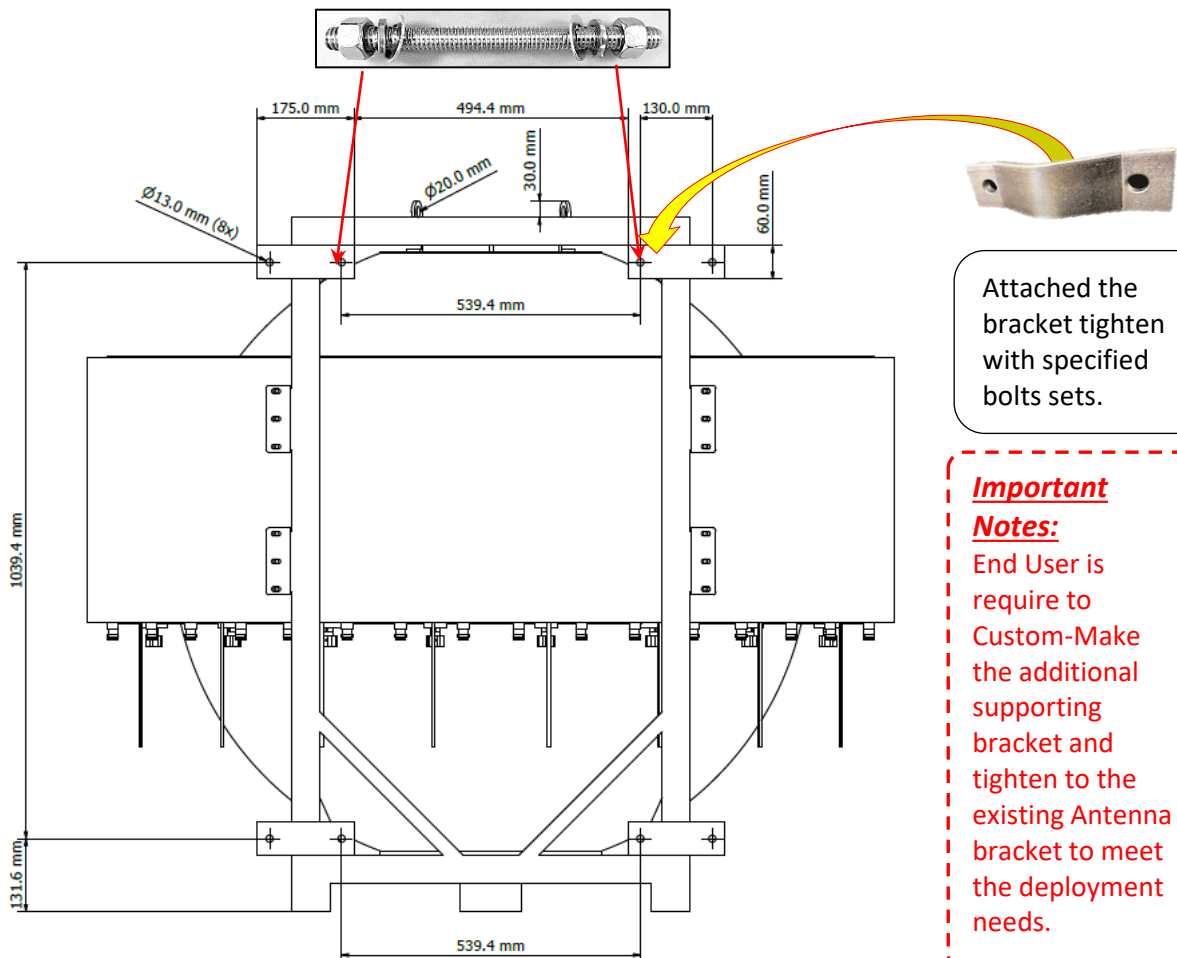
Strictly comply to the Local authority and regulatory on Workplace Safety and Health Control and Measure when moving and transportation of large or heavy equipment, appropriate material handling machine should be use.

(Risk Assessment apply for Forklift or Pallet Truck Lifting)



3.20 Bracket Mounting

Item	Lens Size	Holes Size	Bracket Qty	Bolt & Nuts Sets
1	120cm	Ø13mm x 8	4	M12 x 20cm = 8 Sets



3.30 Installation using a crane

Strictly comply to the local authority and regulatory on Workplace Safety and Health Control and Measure when performing lifting of large or heavy equipment, appropriate material handling machine should be used and only certified personnel should perform the task.

(Risk Assessment requirement applies for both Up-Lifting and Down-Lifting.)

3.31 Lifting the Antenna

The antenna has 2 hook points installed on the top frame (located slightly behind the center of the sphere). These hooks are designed at the center of gravity point of the antenna. A cable, rope can be securely fastened to the hooks and the antenna can be lifted using a crane as pictured below.

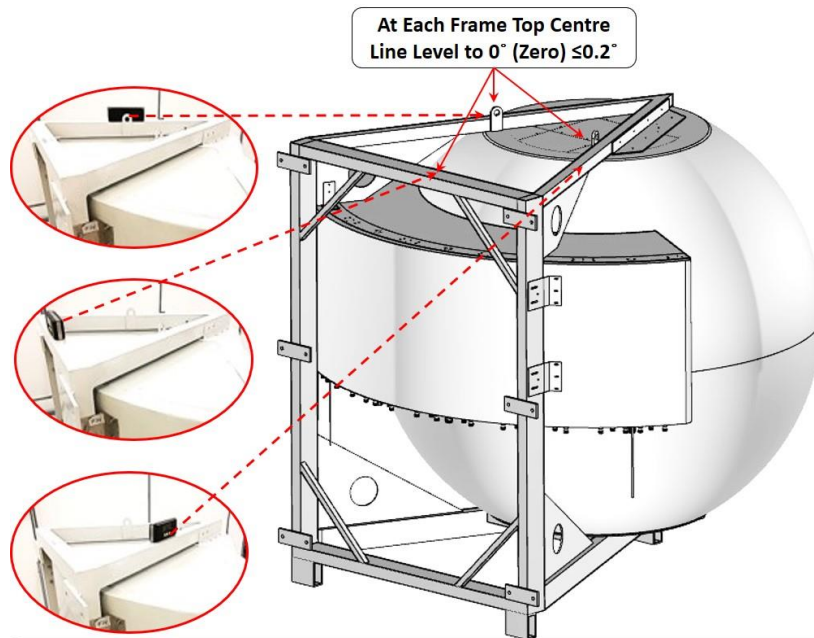


3.40 Antenna Installation

With reference to **Item 3.2 Bracket Mounting Procedure**, End user is required to Custom-Make the additional supporting bracket and tighten it to the existing Antenna bracket to meet the deployment needs.

3.41 Antenna Leveling

After the Antenna is mounted to the bracket, it is required to be adjusted to 0° (Zero Degree) with $\leq 0.2^\circ$ on 3 sides of the frame top level. (Rear, Right & Left=As shown in picture)



ANTENNA LEVELING ADJUSTMENT (AFTER INSTALLATION)

3.42 Digital Level Gauge Calibration

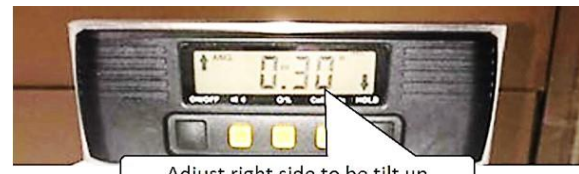
DIGITAL LEVEL GAUGE



3.43 Adjustment Requirement



ANTENNA LEVELING ACCEPTED



REQUIRE ADJUSTMENT